13. (New) The method of Claim 12, wherein the semi-interpenetrating or interpenetrating polymer networks are cartilage.

14. (New) The method of Claim 13 wherein the electromagnetic radiation is selected from the group consisting of x-rays, ultrasound, infrared radiation, far infrared radiation, ultraviolet radiation, long-wavelength ultraviolet radiation, and visible light.

15. (New) The method of Claim 13 wherein the suspension further comprises a photoinitiator.

16. (New) The method of Claim 15 wherein the photoinitiator is selected from the group consisting of erythrosin, phloxime, rose bengal, thonine, camphorquinone, ethyl eosin, eosin, methylene blue, riboflavin, 2,2-dimethyl-2-phenylacetophenone, 2-methoxy-2-phenylacetophenone, 2,2-dimethoxy-2-phenylacetophenone, and other acetophenone derivatives.

17. (New) The method of Claim 16 wherein the suspension further comprises a cocatalyst.

18. (New) The method of Claim 17 wherein the cocatalyst is selected from the group consisting of N-methyl diethanolamine, N,N-dimethyl benzylamine, triethanolamine, triethylamine, dibenzylamine, N-benzylethanolamine, and N-isopropyl benzylamine.

19. (New) The method of Claim 18 wherein the cocatalyst is triethanolamine.

20. (New) The method of Claim 12 wherein the semi-interpenetrating or interpenetrating polymer networks form a tissue equivalent in a subject, comprising:

injecting a suspension of dissociated cells in a solution of a biocompatible polymer into a subject, and

exposing the suspension to free radicals generated by electromagnetic radiation from an electromagnetic source external to the injected suspension so that

the electromagnetic radiation penetrates through tissue to generate free radicals thereby forming the tissue equivalent.

21. (New) The method of Claim 20 wherein the x-rays, ultrasound, infrared radiation, far infrared radiation, ultra-violet radiation, long-wavelength ultraviolet radiation, or visible light is applied externally to the skin.

22. (New) The method of Claim 20 wherein the x-rays, ultrasound, infrared radiation, far infrared radiation, ultra-violet radiation, long-wavelength ultraviolet radiation, or visible light is applied within a synovial space to a polymer-cell suspension injected into an adjacent joint.

23. (New) The method of Claim 12 wherein the semi-interpenetrating or interpenetrating polymer networks form a tissue equivalent in a mold, comprising:

injecting a suspension of dissociated cells in a solution of a biocompatible polymer into a mold, and

exposing the suspension to free radicals generated by electromagnetic radiation from an electromagnetic source external to the suspension so that the electromagnetic radiation generates free radicals thereby forming the tissue equivalent.

EXHIBIT A

Claim Amendments: Pending Claims After Entry of the Instant Amendment

12. (New) A method for making semi-interpenetrating or interpenetrating polymer networks, comprising: exposing a suspension of dissociated cells in a solution of a biocompatible polymer to free radicals generated by electromagnetic radiation from an electromagnetic source external to the suspension so that the electromagnetic radiation generates free radicals thereby forming the semi-interpenetrating or interpenetrating polymer networks.

13. (New) The method of Claim 12, wherein the semi-interpenetrating or interpenetrating polymer networks are cartilage.

14. (New) The method of Claim 13 wherein the electromagnetic radiation is selected from the group consisting of x-rays, ultrasound, infrared radiation, far infrared radiation, ultraviolet radiation, long-wavelength ultraviolet radiation, and visible light.

15. (New) The method of Claim 13 wherein the suspension further comprises a photoinitiator.

16. (New) The method of Claim 15 wherein the photoinitiator is selected from the group consisting of erythrosin, phloxime, rose bengal, thonine, camphorquinone, ethyl eosin, eosin, methylene blue, riboflavin, 2,2-dimethyl-2-phenylacetophenone, 2-methoxy-2-phenylacetophenone, 2,2-dimethoxy-2-phenylacetophenone, and other acetophenone derivatives.

17. (New) The method of Claim 16 wherein the suspension further comprises a cocatalyst.

18. (New) The method of Claim 17 wherein the cocatalyst is selected from the group consisting of N-methyl diethanolamine, N,N-dimethyl benzylamine, triethanolamine, triethylamine, dibenzylamine, N-benzylethanolamine, and N-isopropyl benzylamine.

19. (New) The method of Claim 18 wherein the cocatalyst is triethanolamine.

20. (New) The method of Claim 12 wherein the semi-interpenetrating or interpenetrating polymer networks form a tissue equivalent in a subject, comprising:

injecting a suspension of dissociated cells in a solution of a biocompatible polymer into a subject, and

exposing the suspension to free radicals generated by electromagnetic radiation from an electromagnetic source external to the injected suspension so that the electromagnetic radiation penetrates through tissue to generate free radicals thereby forming the tissue equivalent.

21. (New) The method of Claim 20 wherein the x-rays, ultrasound, infrared radiation, far infrared radiation, ultra-violet radiation, long-wavelength ultraviolet radiation, or visible light is applied externally to the skin.

22. (New) The method of Claim 20 wherein the x-rays, ultrasound, infrared radiation, far infrared radiation, ultra-violet radiation, long-wavelength ultraviolet radiation, or visible light is applied within a synovial space to a polymer-cell suspension injected into an adjacent joint.

23. (New) The method of Claim 12 wherein the semi-interpenetrating or interpenetrating polymer networks form a tissue equivalent in a mold, comprising:

injecting a suspension of dissociated cells in a solution of a biocompatible polymer into a mold, and

exposing the suspension to free radicals generated by electromagnetic radiation from an electromagnetic source external to the suspension so that the electromagnetic radiation generates free radicals thereby forming the tissue equivalent.